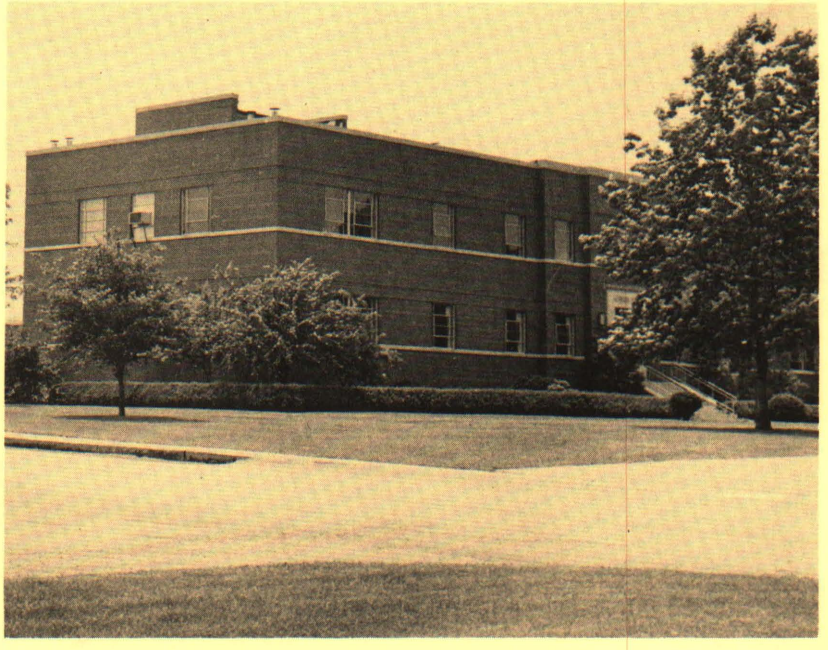
HORTICULTURE SERIES 396
JUNE 1973

HOWLETT HALL
The Ohio State University

GRADUATE STUDY HANDBOOK
Department of Horticulture
The Ohio State University and
Ohio Agricultural Research and Development Center



GOURLEY HALL
Ohio Agricultural Research and Development Center

CONTENTS

FOREWORD

The purpose of this manual is to provide information concerning departmental policies in the planning and execution of graduate study programs. It is also designed to facilitate mutual understanding between students and faculty. This publication is not intended to replace items included in either the Graduate Bulletin or the Graduate Faculty Handbook. It is rather to serve as a supplement to these publications.

The Department of Horticulture provides training leading to the Master of Science and Doctor of Philosophy degrees in Horticulture with specialization in Floriculture, Landscape Horticulture, Pomology, Horticultural Food Technology, and Vegetable Crops.

Horticulture graduate students from many sections of the world attend The Ohio State University. This provides all students the opportunity to become acquainted with the people and horticulture of the various countries represented. Typically, between thirty and forty students are enrolled in the graduate program of the department at any one time.

The department is housed in a new three and one half million dollar facility on The Ohio State University campus in Columbus, Ohio. This facility, completed in the fall of 1969, includes modern office space and laboratory facilities, the latest in research greenhouse and headhouse accommodations, and one of the most modern and versatile food processing pilot plants in the country. Office and laboratory space is available for from thirty-five to forty graduate students in the Columbus facility, Howlett Hall. Nearby farm facilities are available for field plot work.

The department also occupies an up to date facility, Gourley Hall, on the Ohio Agricultural Research and Development Center campus at Wooster, Ohio. This facility, with modern well equipped laboratories and greenhouses as well as adjoining orchards and vegetable plot areas, is available for graduate research.

Faculty of the Department of Horticulture, The Ohio State University and the Ohio Agricultural Research and Development Center, September 29, 1972. FIRST ROW: A. R. Mosley, E. K. Alban, W. A. Gould, R. G. Hill, Jr., H. A. Rollins, Jr., J. L. Caldwell, F. O. Hartman, D. W. Kretchman. SECOND ROW: D. C. Ferree, E. C. Wittmeyer, J. D. Utzinger, S.Z. Berry, J. M. White, F. K. Buscher, T. A. Fretz, W. M. Brooks, E. M. Smith, M. E. Ferree, T. C. McDowell, G. A. Cahoon. THIRD ROW: J. M. Martin, D. E. Crean, H. K. Tayama, J. F. Gallander, J. R. Geisman, P. C. Kozel, A. C. Peng, D. C. Kiplinger, G. L. Staby, M. Kawase. MISSING: W. L. Bauerle, W. L. George, W. A. Oitto, T. D. Sydnor.

GRADUATE TRAINING IN HORTICULTURE

- WHAT IS IT? -

Horticulture is a broad and dynamic field encompassing many areas including production, utilization, and processing of fruits and vegetables for the everyday diet, as well as the production and utilization of flowers and ornamental plants for the beautification and enrichment of man's environment. The horticulturist draws upon the information generated through a number of specific disciplines and integrates this information into a total system designed to solve the many problems within the various horticultural industries. The horticulturist is continually seeking ways and means whereby the various horticultural industries can fully capitalize upon the individual opportunities that exist. The end result being to enhance the level of living within society.

Graduate training is that relatively short period of transition from a student to a teacher, researcher, extension specialist, or other related professional career. Graduate training is a period of advanced learning and research experience in a specific area of interest. There are minimum standards for the M.S. and Ph.D. degrees. However during your period of advanced study you will be within an environment that you will probably not ever experience again. You will have more time for diverse activities and experimentation than you are likely to have later on. You should take full advantage of this environment and the opportunities that exist. Graduate study requires complete dedication, it is not an eight to five job.

In your advanced study you will be striving to reach a level of excellence within a prescribed area. Your program of study and course work is not specifically prescribed, but rather developed by you and your guidance committee to assist you in reaching your career goals. You will be responsible also for developing and conducting a research program. The word "Master" in Master of Science and "Philosophy" in Doctorate of Philosophy should have meaning when you complete your graduate training program. No two graduate programs of study should be identical but rather are specifically designed to meet the objectives and goals of the individual.

You alone can decide on the extent and quality of the educational and research experience gained from your graduate training program. Your initiative, more than anything else, will dictate how much, how far, and in what direction this training will take you. Unlike undergraduate studies, the graduate program is <u>not</u> based mainly on the ability of the student to earn good grades in organized course work. More important than grades is your participation in the entire horticultural program and learning experience of what is going on around you. Within your graduate program you are expected to develop a "feel for" the total broad field of Horticulture. This will not likely be accomplished through strictly formal studies but will come from working closely with the staff of the department and the other graduate students. You will find many exciting things going on within the department; keep your eyes open and become involved.

You will not likely be required to take many trips out into production areas or to processing plants, but these opportunities do exist. Express your interest and staff members will be more than willing to take you along with them as occasions arise. Such experiences can be valuable in your total development. Become aware of the varied programs of the department and offer to help students and staff members in the execution of their programs. Such experiences can be extremely valuable to you in developing the total appreciation of your chosen field of specialization.

Another unique feature of graduate education is that the usual freedom during periods between terms will no longer exist. Instead you will likely find yourself engrossed in research, literature reviews, or some other phase of your total program. If you are on an assistantship you may find yourself actively involved in research programs of your advisor. Graduate study is more than a full time occupation and what you get out of it in terms of preparation for a stimulating professional career will largely be determined by what you put into it. Always keep in mind that you can never really know what experiences will be valuable in the future. Consequently, the more complete and varied these experiences, the better trained and qualified you will be.

Bear in mind that as you proceed through your program of study and related activities you are in fact writing your own recommendations. The strength of these recommendations will depend upon you.

DEPARTMENTAL ORGANIZATION

The Department of Horticulture at The Ohio State University and Ohio Agricultural Research and Development Center has a number of missions and responsibilities. An important phase of the total program is undergraduate and graduate instruction to prepare students to effectively assume leadership roles within the various horticultural industries, or to serve the horticultural educational needs of people. The research programs of the department are primarily geared to generate that information needed by the various horticultural industries of the state and nation to reach their full potential. Some of these research efforts may be applied in nature, others may be designed to generate more fundamental information needed to further advance applied technology. Within the department there are strong Extension programs to assist the horticultural industries and the people of Ohio in applying new technology generated through research.

The faculty of the department consists of thirty four members, each with responsibilities in resident instruction, research, or extension. Most of the faculty have responsibilities in more than one area. (See appendix) All faculty are available to assist and consult with students. A portion of the faculty of the of the department hold appointments on the graduate faculty. There are two categories of such appointments, Category 1 and Category 2. Those faculty holding a Category 1 status may serve as major advisors to M.S. candidates and serve on Ph.D. committees. Those faculty holding Category 2 appointments may also serve as Ph.D. major advisors and serve as Graduate School Respresentatives on doctoral examining committees.

In addition to the laboratory, greenhouse, and field facilities available to the department on the Columbus campus, the department is also assigned laboratory, greenhouse, and field research areas at the Ohio Agricultural Research and Development Center in Wooster. Ten of the full time faculty of the department are located on the OARDC campus. All graduate students initiate their programs on the Columbus campus but do have the option, upon approval of the student's Guidance Committee, to carry out a research program at the Ohio Agricultural Research and Development Center.

At The Ohio State University and the Ohio Agricultural Research and Development Center there are strong related departments that facilitate graduate study programs within the department. Some of the more critical of these departments are Botany, Entomology, Agricultural Economics, Biochemistry, Agricultural Engineering, Plant Pathology, Food Science and Nutrition, and Agronomy.

Within the Department of Horticulture there is a Graduate Committee that consists of not less than five members of the graduate faculty. This committee is primarily the executive committee of the graduate faculty of the department. It carries on routine operations related to graduate work and proposes improvements in such work for consideration by the department. The scope of the functions of a departmental graduate committee are the responsibility of the department and are identified further within this handbook and in the Graduate Faculty Handbook.

The Department of Horticulture offers a comprehensive graduate program in which the extensive course work is designed to broaden and deepen the base of the student's knowledge of the field as a whole. Thus, the culminating research and final dissertation are kept in the proper relationship to the total process. Such a program, covering major scientific contributions in horticulture and allied fields, such as botany and biochemistry, necessarily expands student aptitude and capacity as well as knowledge of the area of specialization.

The principal fields for specialization and research are Floriculture, Landscape Horticulture, Fruits (pomology), Vegetable Crops (olericulture), and areas of Food Processing and Technology. Certain general horticultural courses offered by the department are taken by graduate students in each of these departmental subdivisions.

Within the production fields special attention is given to plant nutrition, physiology, biochemistry, growth and plant development, plant improvement by breeding and selection, and anatomical and cytological problems specifically related to the culture of horticultural plants. The effects of light, temperature, moisture, and growth regulators upon plant development are of special importance in the graduate program. Chemical weed control and the postharvest physiology of fruit, vegetable, flower, and ornamental plantings have been allotted increased emphasis as changes in these fields demand. Attention is also directed toward plant taxonomy and the use of plants in the landscape. In processing and technology, quality evaluation and control, improvement of processed foods, and the study of specific unit operations as related to process efficiencies, receives emphasis. The effects of plant characteristics on processing requirements and grade relationship are likewise considered, and appropriate attention is given to preservation methodology.

While a graduate student will typically concentrate his studies in a specific field of specialization, he will find that many of the faculty have discipline training and background that provide them the opportunity to work and provide guidance in more than one specific area. Students are encouraged to get to know and seek technical help from as many of the faculty as possible.

ELEMENTS OF A GRADUATE PROGRAM

There are many elements within a total graduate program of study. The following are the more important within the Department of Horticulture:

MAJOR PROFESSOR

The key individual in the development of any graduate program is the major advisor or major professor. The major advisor has the responsibility to help the student plan a program of study that will provide him or her the opportunity of reaching a prescribed level of excellence. It is important to recognize that the advisor is to advise and counsel and he is not to "carry" the student. It is the responsibility of the student to achieve the prescribed level of excellence with the advisor directing the way.

The major professor is assigned by the Chairman of the department, however in those instances where the specific interest of the student is uncertain, the Chairman of the graduate committee may serve as the student's major professor until the student's needs and goals are more accurately assessed.

The assignment of a major advisor is based on the interests and goals of the student, the source of funds if the student is provided financial assistance, the current workload and interest of the faculty of the department and the availability of facilities. In the assignment of a faculty advisor every effort will be made to insure that the student has the best possible opportunity to achieve his or her career goals.

A student may change major advisors, however this is discouraged and will be allowed only after a complete review of the situation by the graduate committee. This committee will make recommendations to the Chairman of the department who will make the final decision. In many respects however it is desirable for a change in advisors to occur between the M.S. and Ph.D. degrees.

GUIDANCE COMMITTEE

Within the first quarter of the enrollment of a graduate student, a Guidance Committee will be selected. The constitution of this committee will be determined by the student and his major advisor and shall consist of at least two members of the graduate faculty in addition to the advisor for a M.S. candidate and three members of the graduate faculty in addition to the advisor for a Ph.D. candidate. A portion of the Guidance Committee may be made up of qualified faculty members from departments other than Horticulture. Members of the Guidance Committee would logically, but not necessarily, be members of the examining committee. In all instances the student's major advisor will serve as Chairman of the Guidance Committee. The Chairman of the Departmental Graduate committee shall serve as an ex-offico member of all departmental Guidance Committees.

It is the function of the Guidance Committee to assist the advisor and student in developing an appropriate course of study. It would also be the function of this committee to review the detailed research proposal, once the preliminary plan has been outlined by the advisor and the student. The role of the committee members would be to offer helpful suggestions toward the most effective execution of the research effort.

EXPLORATORY EXAM

Prior to the start of the student's second quarter of graduate study, an exploratory exam will be held. The purpose of this exam is to determine the student's current level of competence and to serve as a guide in the development of a total plan of study to assist the student in achieving his determined career goals. The exam will be arranged by the student's major advisor and will be conducted by the student's Guidance Committee. The exam will typically be an informal oral exam but may also be preceded by a written exam at the discretion of the student's major advisor. At the time of this oral exam, the student will also be advised as to his future potential for success in a graduate program of study.

PLAN OF STUDY

Within two weeks after the exploratory exam, a complete program of study will be prepared by the student and his or her major advisor. This plan will include a schedule of courses to be specifically completed and will be based upon the results of the exploratory exam and the recommendations of the Guidance Committee. A timetable of the proposed total program will also be prepared at this time. The plan of study and the timetable will be submitted to the Graduate Committee for approval and inclusion in the student's file. The plan of study shall become the minimum requirement for graduation. All members of the student's Guidance Committee should be provided a copy of the plan. If there is to be any deviation from the plan, modifications must be approved by the student's Guidance Committee and the departmental Graduate Committee.

LANGUAGE REQUIREMENTS

"The Graduate School has no foreign language requirement for graduate degrees; each department or program committee sets its own requirements." Within the Department of Horticulture a dictionary reading knowledge of two or a comprehensive knowledge of one language may be substituted by additional course work as approved by the departmental Graduate Committee.

GENERAL EXAM

Those students working toward the Ph.D. degree are required to successfully complete a general examination prior to admission to candidacy for the doctoral degree. This exam is intended to be a comprehensive test of the student's mastery of the subject matter, his ability to think and express himself clearly and forcibly, and his capacity to pursue independent research. It is both written and oral and not limited to courses taken. This examination shall be administered by not less than five members of the graduate faculty with the student's advisor as Chairman, the members chosen by the Graduate Committee of the student's department and a Graduate School representative selected by the Dean of the Graduate School. The three members of the examining committee selected by the departmental Graduate Committee shall typically include one member from outside the department. Typically, the Guidance Committee participates in this general exam.

The time and date of the General Exam shall be announced to the faculty of the department two weeks prior to the exam. While this exam shall be an open exam, typically only the members of the committee attend. The Ph.D. General Exam will likely be the most comprehensive testing of the student's knowledge and understanding that he or she will ever undergo. Not only is it important that the student demonstrate a thorough mastery of the specific subject matter within his or her chosen discipline but he or she must demonstrate that he or she has a clear comprehension as to how the individual specific items fit together and likewise be

in a position to utilize knowledge in problem solving situations.

DISSERTATION - Ph.D.

"A dissertation which is a definite contribution to knowledge of importance sufficient to warrant its publication shall be offered by the Ph.D. candidate." Once the student has become familiar with the resources and ongoing research within the department, he and his advisor select an area of research and he then proceeds to develop a specific proposal. This research proposal must first be reviewed and approved by the student's major advisor, then it is to be submitted to the Guidance Committee for their input suggestions and concurrence. Once the proposal has been approved by the Guidance Committee it must receive final review and approval by the Graduate Committee of the department.

RESEARCH PROPOSAL

The dissertation proposal shall be specific and detailed, including the following information:

1. Introduction - a statement as to why the work is important.
2. A brief review of literature - this should be sufficiently detailed to show that the student is familiar with the current state of the literature in the specific area.
3. Objectives - one or more short factual statements as to the objectives of the study.
4. A specific detail of procedures to be used to satisfy each of the listed objectives.

This proposal need not be voluminous, yet it should clearly define what the student plans to do, why it is important, specific objectives, and finally just how he or she would plan to proceed.

THESIS - M.S.

The thesis for a Plan A, M.S. degree is also a scholarly piece of research worthy of publication. The thesis for the M.S. typically does not require the depth of independent research that is expected in a Ph.D. dissertation. However, once the student with the counsel and guidance of his advisor has selected a thesis problem, a proposal as outlined above for the Ph.D. dissertation is prepared for review and approval by the Guidance Committee and the departmental Graduate Committee.

The M.S. candidate may select the Plan B option for a M.S. program. The Plan B program for a M.S. degree in the Department of Horticulture does require more course work, a comprehensive written exam of at least four hours duration, plus an oral exam. The student should discuss the ramifications of a Plan B option with his or her advisor and Guidance Committee before selecting this route.

QUARTERLY REPORTS

Each graduate student enrolled within the department shall submit to the Graduate Committee for deposit in the student's permanent files, a short progress report of the previous quarter's activities and accomplishments. This report is not to be over one page in length and is due no later than two (2) weeks after the beginning of the subsequent academic quarter.

The content of this brief report should be informative and summarize the

quarter's activities. It should list courses taken and grades received. It should also include progress on the research problem as well as meetings attended, courses taught, lectures or seminars given, etc. Copies of this report shall be provided to the student's major advisor and members of his Graduate Committee. It is important that if the student is to receive maximum counsel and guidance from those involved with his program these people must be kept informed of progress and in such a way that future reference may be made to the progress reports. They will also serve the purpose of providing the student the opportunity to more carefully evaluate his own specific progress.

FINAL EXAM

For the Ph.D. degree a final oral exam is required, dealing intensively with the portion of the candidate's field of specialization in which his dissertation falls. However it need not be confined exclusively to the subject matter of the dissertation. This exam is in reality a defense of the research results and other related subject matter.

For the M.S. degree there are two options open to the student, Plan A and Plan B. For Plan A the student's comprehensive exam is held after the submission and approval of the thesis. It may be written or oral or both, at the option of the examining committee. For a Plan B program, the M.S. student in the Department of Horticulture is required to take a comprehensive exam which must include a written exam designed by the student's Guidance Committee to last not less than four hours plus an oral exam, typically of two hours duration.

PUBLICATIONS

Research is complete only after the results of that research have been published and transmitted to those that may have interest in, or use for, the results. All graduate students are expected to prepare one or more manuscripts suitable for appropriate publication. The type of publication and the appropriate place for publication will be determined by the major advisor in counsel with the student.

SEMINAR

Departmental seminars are an integral part of the total academic atmosphere within the department. Seminars are presented by outside speakers, Horticulture faculty, and graduate students, with emphasis on the latter. Typically, seminars are scheduled at noon on Fridays with everyone bringing a "sack lunch". It is one of the few opportunities for staff and students of the department to meet and exchange ideas.

One of the principal features of seminar is to provide students an opportunity to refine their communicative skills. The ability to communicate effectively with fellow colleagues and lay personnel is extremely important in the development of any professional worker. Another important feature of seminar is to provide everyone with a clearer picture of the total scope and breadth of departmental activities. They also provide the student the opportunity to receive constructive suggestions concerning his research and presentation. Each student is to meet with the Chairman of the Seminar Committee within one week after presenting a seminar topic to review possible areas for improvement.

The overall seminar programs are developed by the departmental Seminar Committee consisting of four faculty members and two graduate students. The two graduate students are selected by the total graduate student body of the department.

All graduate students are expected to participate in all departmental seminars during their period of graduate study in the department except when course conflicts occur. Those students taking seminar for credit shall present a seminar sometime during the quarter of enrollment. The specific time is arranged by the Chairman of the Seminar Committee for that specific quarter. The topic to be presented will be determined by the student and his advisor and reviewed by the Chairman of the Seminar Committee. Each student should have a brief summary statement prepared with the approval of his advisor and the Chairman of the Seminar Committee to be distributed at the time of the seminar presentation. A Master's candidate will present at least one seminar on his or her individual research or specific area of study. A Ph.D. candidate will present at least two seminars. One would be presented near the end of his or her period of study covering the results of individual research; the other may be a review of specific research plans or some other closely related subject.

SEQUENCE OF PROGRAM

M.S. - PLAN A

1. Registration as a graduate student.
2. Major advisor assigned.
3. Guidance Committee selected prior to the end of the first quarter of study.
4. Exploratory Exam prior to the end of the first quarter of study.
5. Submit 1st quarterly report.
6. Total program of study prepared within two weeks after the exploratory exam and submitted for approval.
7. Research proposal developed and submitted to the Guidance Committee for approval.
8. Seminar
9. Complete Thesis program.
10. Complete paper relating to research for publication.
11. Final Exam.

M.S. - PLAN B

1. Registration as a graduate student.
2. Major advisor assigned.
3. Guidance Committee selected prior to the end of first quarter of study.
4. Exploratory exam prior to the end of the first quarter of study.
5. Submit 1st quarterly report.
6. Total program of study prepared within two weeks after the exploratory exam and submitted for approval.
7. Seminar.
8. Final Exam.

PH.D.

1. Registration as a graduate student.
2. Major advisor assigned.
3. Guidance Committee selected prior to end of first quarter.
4. Exploratory exam prior to the end of the 1st quarter of study.
5. Submit 1st quarterly report.
6. Program of study prepared within two weeks after the exploratory exam and submitted for approval.
7. Research plans developed and project proposal submitted for review and

approval of the Guidance Committee.

8. Seminar
9. Completion of formal course work.
10. General examination.
11. Completion of research.
12. Seminar
13. Completion of dissertation.
14. Preparation of research results suitable for appropriate publication.
15. Final exam.

GENERAL INFORMATION

Within the department certain guidelines and policies have been established to best serve the interests of those students involved and those that are providing the resources needed to make graduate study programs possible.

FINANCIAL SUPPORT

Within the department there are several sources of financial support monies available. They include Teaching Associates, supported through The Ohio State University; Research Associates, supported by the Ohio Agricultural Research and Development Center; Research Associates, supported by various individual funds made available from interested horticultural groups; and Fellowships. These monies are not gifts but rather monies to provide those most worthy candidates the opportunity to continue advanced studies. In return for this financial support the student assumes important obligations.

Those students supported as Teaching or Research Associates assume the obligation of providing twenty hours per week or approximately one thousand hours per year of service to the department. The specific nature of this service is determined by the student's major advisor and approved by the department Chairman. Support for students not living up to assumed responsibilities may be terminated.

In the awarding of financial support for graduate study there are always many more applicants than support monies. Consequently, a careful evaluation of each applicant is made and offers extended to those candidates that do show the greatest potential for further graduate study and for the use of the knowledge gained. The department does not assume the responsibility for giving priority to those students that are already in the program at their own expense. Acceptance for graduate study in the department is not considered to be a commitment for present or for future financial support.

VACATIONS

Graduate students receiving financial support are authorized two weeks vacation per year. Specific plans however, must be first approved by the student's major advisor. Vacation should not be taken at times that would hamper the progress of the specific program in which the student is involved or the departmental program that relates to the student's source of financial support.

OFFICE SPACE

All full time graduate students will be provided office space within the department. This space will be arranged by the student's advisor and the Chairman of the department. Students are not to change office locations without prior approval of their faculty advisors and the Chairman of the department. The names of the students occupying the office space should be posted in the nameplate provided.

KEYS

Appropriate keys may be arranged for through the secretary in the main departmental office.

DUPLICATING EQUIPMENT

Duplicating equipment is available in Room 207, Howlett. A modest per sheet fee is charged for personal use to cover the cost of paper.

SECURITY

As a graduate student in the department you have rights and privileges, but you also have responsibilities. Each student should assume the responsibility for security of the building, labs, and other facilities. If the doors are to be locked, make certain they are locked. Be alert to strangers; we have had thefts in the past. This is your department too, help preserve it.

LABS AND RESTRICTIONS

There are many laboratories and other research facilities assigned to the department. In each instance the facility is the responsibility of a specified faculty member. These facilities are available for graduate student use, however arrangements for use of equipment and/or space should be made through the student's advisor and the person responsible for the facility. It is very important that the person responsible for the facility give approval for its use and be kept completely informed of programs and projected use.

For safety reasons, no one will be allowed to work alone in laboratories before 7:00 A.M. or after 6:00 P.M. Accidents have occurred in the past and while we do not expect such incidents in the future, they may occur.

HOUSEKEEPING

We have what we consider to be some of the best facilities assigned to us for horticultural research, teaching, and extension of any university in the country. It is up to everyone to keep his office and work areas picked up, clean, and neat. We have many important visitors touring the horticultural facilities from time to time. The impression made on these individuals can not only be important to the department, but to you individually.

GRADUATE STUDENT GRIEVANCE

If a graduate student has concerns, questions, or grievances regarding any phase of the programs, policies, and practices within the graduate study program area of the department, these matters should be brought to the attention of the departmental Graduate Committee for consideration and appropriate action.

APPENDIX

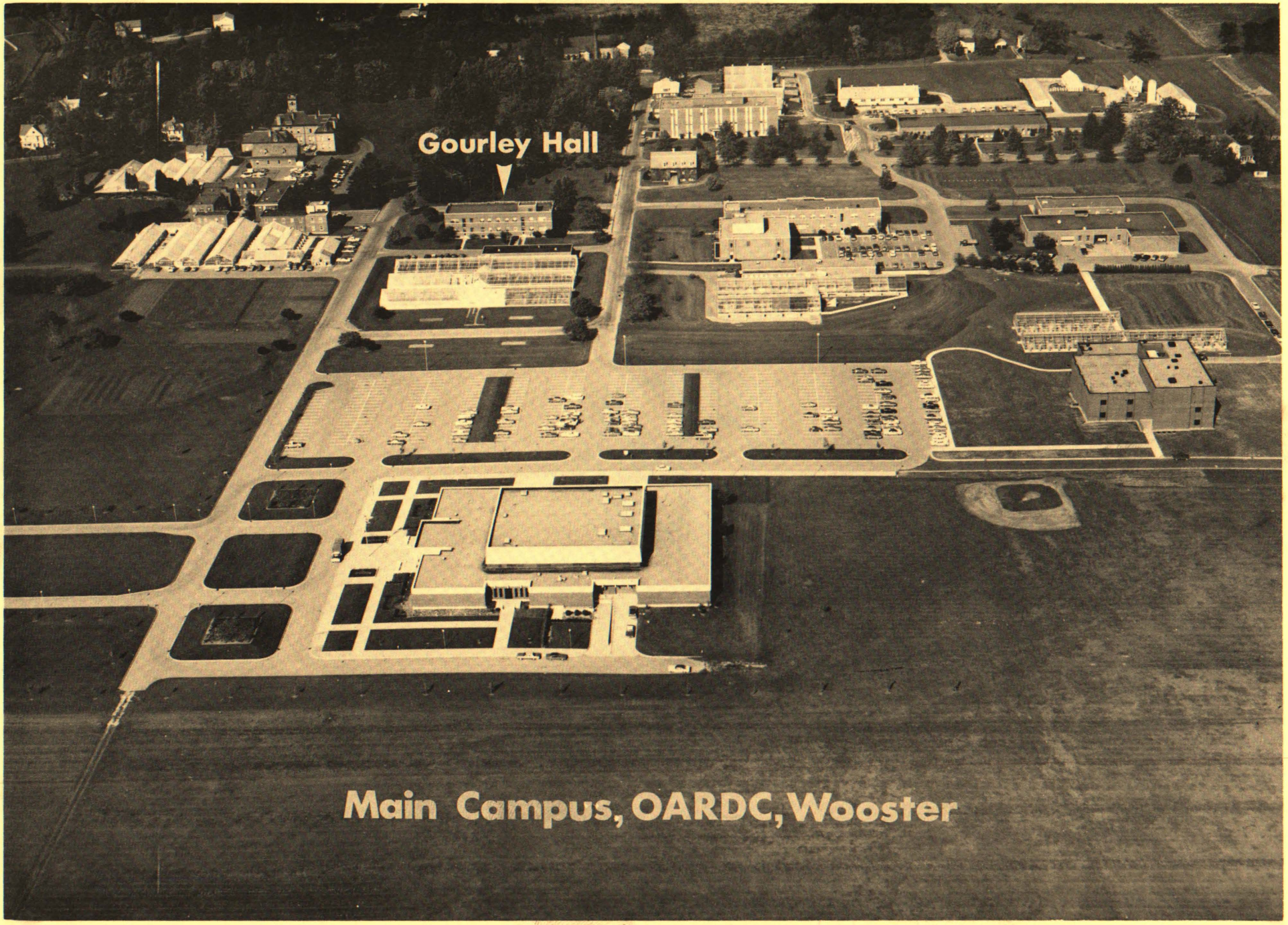
FACULTY - DEPARTMENT OF HORTICULTURE

May 1, 1973

Name Year Appointed (Current Rank)	Degrees	Assignment R	 T	 E	Area of Specialization
Alban, E.K. 1946 (Professor	BA Denison '36 MS OSU '43 PhD OSU '45	15	85	-	Commercial Veg. Production and Weed Control
Bauerle, W.L., Jr. 1970 (Assist. Prof.)	BS Del Val '64 MS Rutgers '66 PhD Cornell '70	100	-	-	Commercial Green house Vegetable Crops
Berry, S.Z. 1967 (Assoc. Prof.)	BS Cornell '52 MS UNH '53 PhD U of Cal '57	100	-	-	Processing Tomato Variety Development
Brooks, W.M. 1958 (Assoc. Prof.)	BS OU '54 MS OSU '57	-	-	100	Comm. Outdoor and Greenhouse Veg. Crop Production
Buscher, F.K. 1956 (Assist. Prof.)	BS OSU '50 MS OSU '65	- (Area Agent)	-	100	Nursery Crop Production
Cahoon, G.A. 1963 (Professor)	BS Utah SU '50 PhD U of Cal '54	70	-	30	Grape Prod. and Tree Fruit Nutrition
Caldwell, J.L. 1955 (Professor)	BS OSU '53 MS OSU '54	-	-	100	Landscape Hort. Home Grounds
Crean, D.C. 1969 (Assist. Prof.)	BA U of Cambridge '60 MA U of Cambridge '66 PhD OSU '69	50	50	-	Food Tech.-Chem. Comp. of Hort. Crops
Ferree, D.C. 1971 (Assist. Prof.)	BS Penn State '65 MS U of Maryland '68 PhD U of Maryland '69	100	-	-	Tree Fruit Prod.
Fretz, T.A. 1972 (Assistant Prof.)	BS U of Maryland '64 MS U of Del. '66 PhD U of Del. '69	40	60	-	Nursery Crops Container Prod.

Name Year Appointed (Current Rank)	Degrees	Assignment R	 T	 E	Area of Specialization
Gallander, J.F. 1963 (Professor)	BS OSU '60 PhD OSU '64	100	-	-	Food Technology Fruit Products
Geisman, J.R. 1958 (Professor)	BS OSU '55 MS OSU '56 PhD OSU '58	50	50	-	Food Technology Waste Disposal
George, W.L., Jr. 1971 (Assoc. Prof.)	BS Del Val '60 MS Rutgers '62 PhD Rutgers '66	60	40	-	Greenhouse Vegetable Variety Development
Gould, W.A. 1947 (Professor)	BS U of N.H. '42 MS OSU '47 PhD OSU '49	50	50	-	Food Proc. and Tech. Emphasis on Vegetables
Hartman, F.O. 1948 (Professor)	BS U of Toledo '37 MS OSU '41 PhD OSU '51	15	85	-	Fruit Production
Hill, R.G., Jr. 1950 (Professor)	BS U of Maryland '45 MS U of Maryland '48 PhD U of Maryland '50	75	10	15	Assoc. Chairman Fruit Culture
Kawase, M. 1966 (Professor)	BS U of Tokyo '51 MA U of Tokyo '54 MS U of Minn. '58 PhD Cornell '60	100	-	-	Propagation Ornamental Plants
Kiplinger, D.C. 1941 (Professor)	BS Iowa SC '37 MS OSU '38 PhD OSU '52	20	80	-	Floral Crop Production
Kozel, P.C. 1968 (Assoc. Prof.)	BS OSU '63 MS OSU '65 PhD Cornell '67	50	50	-	Landscape Hort. Plant Materials
Kretchman, D.W. 1963 (Professor)	BS MSU '53 MS MSU '54 PhD MSU '58	70	30	-	Veg. Crop Prod.
McDowell, T.C. 1968 (Assist. Prof.)	BS OSU '63 MS NCSU '65 PhD OSU '67	50	-	50	Floral Crop Prod.
Mosley, A.R. 1971 (Assist. Prof.)	BS U of K '65 MS U of K '68 PhD Ore. SU '72	75	-	25	Commercial Veg. Prod. Potatoes

Name Year Appointed (Current Rank)	Degrees	Assignment R	 T	 E	Area of Specialization
Oitto, W.A. 1966 (Assist. Prof.)	BS SDSU '41 U of Minn	-	(USDA)	-	Pear Breeding
Peng, A.C. 1968 (Assoc. Prof.)	BS WSU '61 MS MSU '62 PhD MSU '65	50	50	-	Food Tech. - Soy Protein Foods
Rollins, H.A., Jr. 1970 (Professor)	BS U of Conn '50 MS U of NH '51 PhD OSU '54	25	50	25	Department Chairman
Smith, E.M. 1967 (Assoc. Prof.)	BS U of Conn '58 MS OSU '64 PhD OSU '67	-	-	100	Nursery Crop Prod.
Staby, G.L. 1970 (Assist. Prof.)	BS U of Conn '66 MS MSU '67 PhD MSU '70	75	25	-	Floral Crop Prod. Plant Growth Reg.
Sydnor T.D. 1972 (Assist. Prof.)	BS VPI '62 PhD NC State Univ '72	50	50	-	Landscape Hort. Plant Growth Reg.
Tayama, H.K. 1964 (Professor)	BS U of Ill '58 MS U of Ill '59 PhD OSU '63	10	-	90	Floral Crop Prod.
Utzinger, J.D. 1967 (Assist. Prof.)	BS OSU '54 MS OSU '58 PhD OSU '69	-	25	75	Veg. Crop Prod. Youth Programs
White, J.M. 1970 (Assist. Prof.)	BS Clemson '61 MS Clemson '62 PhD OSU '70	-	- (Area Agent)	100	Commercial Veg. Crop Production
Wittmeyer, E.C. 1950 (Professor)	BS OSU '48 -- OSU --	-	-	100	Commercial Veg.



Main Campus, OARDC, Wooster


DISCOVER
DEVELOP
DISSEMINATE